

Wad Ramli Society members' attitude toward Agricultural extension activities and cooperation principles. (Wad Ramli Agricultural cooperative)

Abdalla -M. Ali 1*, Alshifa, A. Marghani 2, Souad, I . Elebead 2

Federal ministry of agriculture and natural resources - General Administration of Extension and Technology Transfer.

Sudan University of science and technology - collage of agriculture Studies - Department of agricultural extension and rural development

ABSTRACT:

This study was conducted to identify and evaluate the attitudes of cooperative members toward agricultural extension activities provided in Wad Ramli agricultural cooperative society. The study aimed to evaluate the role of agricultural extension activities concerning members' knowledge, awareness of the Agricultural Extension Program. This study was conducted in Wad Ramli agricultural cooperative in Khartoum North locality (Bahri) during 2017 – 2019. The necessary data was collected from (292) respondents, were selected randomly using simple random sampling, the questionnaire was used as a tool for data collection. The data were analyzed by computer based on the Statistical Package for Social Science (SPSS) using different statistical procedures, frequency, and percentage, Likert scale, used to measure the members' evaluation to agricultural extension programs. The result showed that farmers' benefits from agricultural extension activities were low to medium level. Such as the lack of farmer's knowledge about the general principles of cooperatives, based on the study findings a set of recommendations were suggested for improving Cooperative by the role of extension activities on the members' knowledge values and principles through. Intenfyin extension programs and educating members to develop an awareness of the group action

Keywords: Cooperatives, farmers Benefits, attitude towards; general Principle; members Satisfaction.

Introduction:

Co-operative societies are a units with a specific class or special activity aiming at realizing sustainable development through general principles of cooperation represented on Voluntary and Open Membership, Democratic Member Control (one member, one vote), Members' Economic Participation, Autonomy and Independence, Education, Training, and Information, Cooperation among Cooperatives, Concern for Community, Chauhan - (2007). The international cooperative Alliance ICA (2004) defined cooperative as autonomous association of persons united voluntarily to meet their common economic social and cultural needs and aspirations through jointly owned and democratically controlled enterprise. A cooperative is means to embody the values of self-help, honesty, openness, self-responsibility, social responsibility, democracy, equality, equity, solidarity, mutual caring, efficiency, effectiveness, transparency and accountability. Cooperatives are present in all the countries and in almost all the sectors, including agriculture, food, finance, health care, marketing, insurance and credit. Agriculture continues to be the engine of economic growth in most developing countries including Sudan. Strong cooperatives are able to overcome many difficulties that facing farmers; Cooperatives are community-based organizations that are not only about the bottom lines of their businesses, but also about the needs of their members and the quality of life in communities. Cooperatives work on the set seven principles, among these principles the seventh principle - Concern for the community derives cooperatives to work for the sustainable development of the community (Kumar, 2015).

The Concept of Agricultural Extension has a wide range of definitions; it was defined by many scholars in different parts of the world. (FAO, 2001), stated that Agricultural extension is the application of scientific research and knowledge to agricultural practices through farmer education. Generally agricultural extension can be defined as the delivery of information inputs to farmers.

The role of Agricultural extension services is invaluable in teaching farmers how to improve their productivity, Extension is also critical to move research from the lab to the field and to ensure a return on investment in research by translating new knowledge into innovative practices. (Anderson 2007). stated that Agricultural Extension plays essential role as communication channel to transfer new ideas and innovations to the farmers

where they are, it encourages them to use and adopt the innovations to increase agriculture product and hence improve their standard of living. That is mainly, because the agricultural extension contributes directly to promoting agricultural development and rising of food production and income so as to improve living conditions of the farmer.

The traditional function of the Agricultural extension is education, its operational strategy to provide the link between a source of knowledge, idea, and information to the ends users who in most instances are the rural farmers; therefore, the duty of the Agricultural extension officer to disseminate all information, complex knowledge in its practical forms and educate the rural peoples. A suggested approach is examined for the Agricultural extension to assume after the formation of a cooperative society. The approach should be that of linkage role and act as a liaison between the client (farmers) and any other credit source. One of those can assist farmers with financial backing when they form themselves into a cooperative society. While the extension services will only play a lesson role and nothing more. The Agricultural extension department can lead the farmers to the banks and at times introduce them to the bankers but as earlier mentioned as a matter of principles avoid being collaterals or guarantors. (Ortmann, 2007).

The first attempts to start modern and structured cooperatives in Sudan were initiated in 1921 during the colonial period by a British District Commissioner in the Delta Tokhar cotton estates; to the East of the country but still there is a noticeable decline in the living standard of a rural household, weariness in productivity (Al-Otaibi, 2007).

Wad Ramli agricultural cooperative society was established in 1949 as the first agricultural cooperative society in Sudan and has been operating it is agricultural and social activities till now, supporting its members with technology credit and Agricultural extension services hoping that empowerment will gradually extend to the more backward and disadvantaged rural, so to, increase the producer's income and improve their living conditions through Cash crops, contribute to meet the local market needs, use modern techniques (Malla, 2018). According to the report writing by Abdel Azim, M- Bellah, the former agricultural guide, Agricultural extension activities in Wad Ramli agricultural cooperative society: in the field of agricultural counseling, it is the unique cooperative employing in its board of directors an agricultural extension agent from the department of agricultural extension and technology transfer, therefore it contributes to the building of the area agricultural extension in addition to implementing many extension programs that improved production, that the cooperative has agricultural extension school of 25 farmers who are weekly meeting to discuss one of the subjects that aim at improving productivity. The formation of cooperative society becomes the responsibility of the extension agent to organize such a people even if the people took initiative of organizing a cooperative society they will need the support and advice of the extension officer who is seen by the rural communities as a spokesman of the government, (BWALA, 2015).

The main objective of this paper is to assess the role of agricultural extension programs on increasing member's knowledge towards the basic principles cooperation.

Material and methods:

This study was conducted in the northern part of Khartoum state (Bahri) in Wad Ramli agricultural cooperative, at Wad Ramli village. The study population is the registered members in the cooperative (1200 members). A simple random sampling technique was used to conduct the research, depending on the homogeneity of the research community (292) Respondents, using the following standard formula:

$$1) SS = Z^2 \times p \times (1-p) / M^2$$

Where:

SS = Sample Size for infinite population

Z = Z value (e.g. 1.96 for 95% confidence level)

P = population proportion (expressed as decimal) (assumed to be 0.5 (50%))

M = Margin of Error at 5% (0.05)

After calculation of sample size you have to correct for the total (estimated) population 2). $SS \text{ adjusted} = (SS) / (1 + [(SS - 1) / \text{population}])$, Cochran, W. G. (1977)

Secondary data were obtained from document analysis, depth review of related literature from the internet and up-to-date extension services reports of Wad Ramli Agricultural Extension Office, published articles and books, reports of government and non-government organizations.

Primary data were collected from the target population using a structured questionnaire. The data collected was analyzed by computer based on the Statistical Package for Social science program (SPSS) Likert Scale was used to measure the members' attitude toward agricultural extension programs. The overall response score for the variables was measured on a 4-point Likert scale (*Likert, 1932*), a method which is now one of the dominant in measuring people's attitudes, views, and experiences (Taylor. et al, 1996). The respondents rated the statements based on scores ranging from a maximum of 4 to a minimum of 1, whereby strongly Agree =4, Agree = 3, Disagree =2, and Strongly Disagree = 1.

Results and discussion:

Agricultural extension activities by

Figure (1) agricultural extension activities provided by agricultural extension office according to the program of the Ministry of Agriculture in Khartoum State

It can be seen from figure (1) 97.9% of the presented by Farmer's field schools, 98.6% of the extension activities such as Demonstration fields, and office visits, Lectures, seminars, and Extension message provided by Ministry of Agriculture in Khartoum State has the same percentage and 2.1% provided by others Such as the Agricultural Bank, Agricultural Research and non-government organization (NGOs), this is a lowest percentage that doesn't represent the seventh principle in the general principles of cooperation between cooperatives.

This was agreed with a similar study conducted in Kenya by David Ree. (2000). the results indicate that government extension is a major source of information in all the communities. investigated

Figure (1): agricultural extension activities

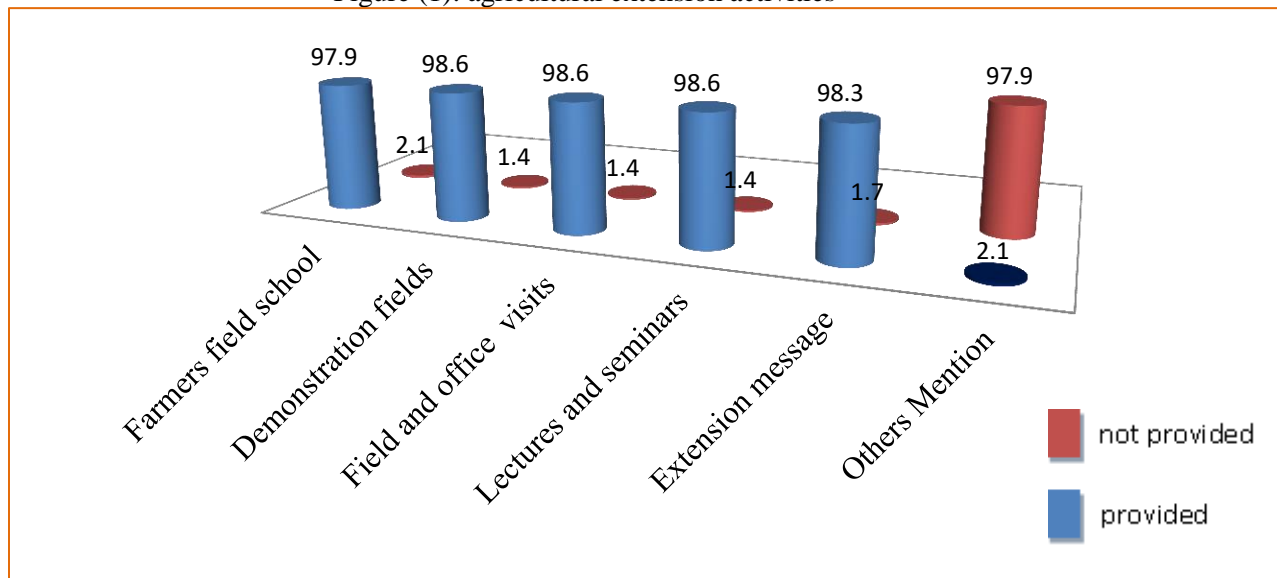


Figure1:

Figure (2) Services provided by agricultural extension

figure (2) the high percentage 91.8% of services Provide production input 44.2% of the farmers were not provided with marketing services, 87.7% Provision of credit, 86.3% Farm management, 73.6% Use advance technologies.

The data on respondents showed that 44.2% of the farmers were not provided with marketing services the market information is one of the most important services for farmers to increasing their productivity and Profitability according to the marketing information.

This result agrees with the food and agriculture organization of the United Nations Rome, (*FAO2017*) use market information for longer-term decisions, farmers should be aware of their storage costs, to decide whether to store or not; in addition, they should have an understanding of the production costs, so that they can use MIS to plan whether to grow new crops or to move to off-season production.

Figure (2) percentage of the members according to Services provided by agricultural extension, (n=292)

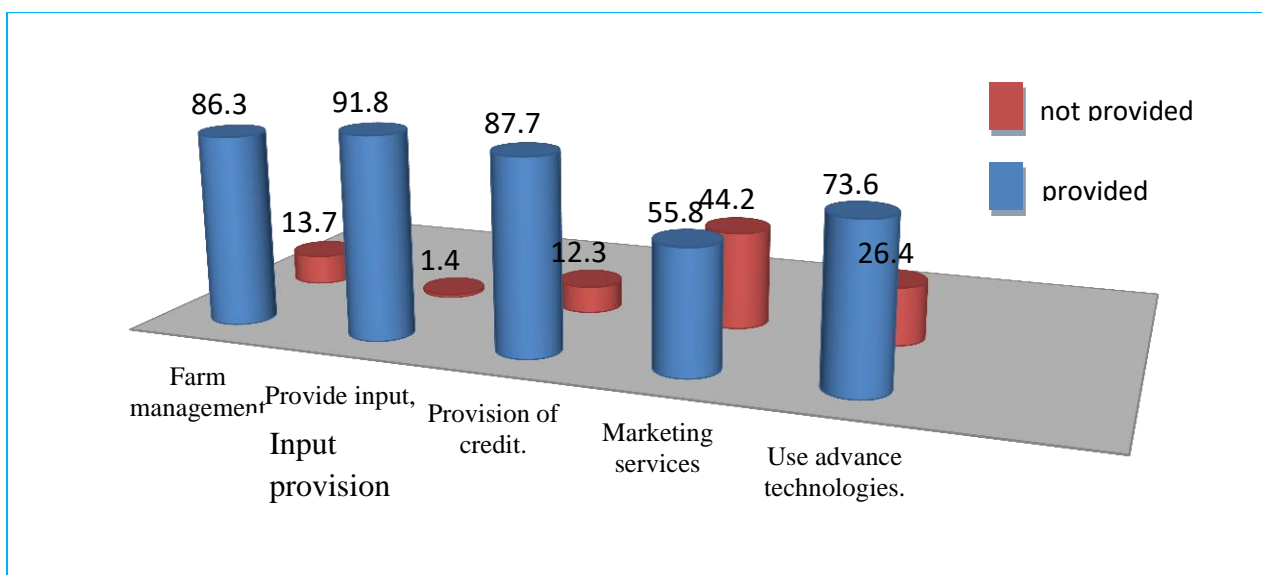


Figure2:

The result on figure (3) The training session result shows that 58.9% of the respondents have attended training courses on Post-harvest transactions, 32.9% have received training courses about group marketing, just 8.2% were attended training courses on group financing. Everybody learns how manage money but not everybody manages it well. So the financial training course is important for helping people to recognize the importance of regular saving and thoughtful expenditure; showing them how to calculate costs and profit margins and work out cash flow plans; now that more and more financial service providers are reaching down to the low-income market and new technology is creating unprecedented opportunities for rural communities to access financial services. Technical know-how is not enough. In order to be competitive and take advantage of the new opportunities that are arising, farmers increasingly have to adapt their farm business to market changes and to improve efficiency, profitability, and income. In response to these changes and Agriculture Organization of the United Nations (FAO) has developed the concept of the Farm Business School (FBS) to build farmers' capacity in entrepreneurial and management skills. The Farm Business School enables farmers to learn and improve their knowledge, change their attitudes and enhance their skills toward improved farm commercialization. The National Bank for Agriculture and Rural Development *Mumbai (2015)* says The training also should cover management of the finances like maintenance of books of account, Management Information System, share capital, borrowings, savings, loans, cash flow, funds flow, receivables management, payables management, investments, etc.

Figure (3) :percentage of the members according to the training field that members participated on it (n=292)

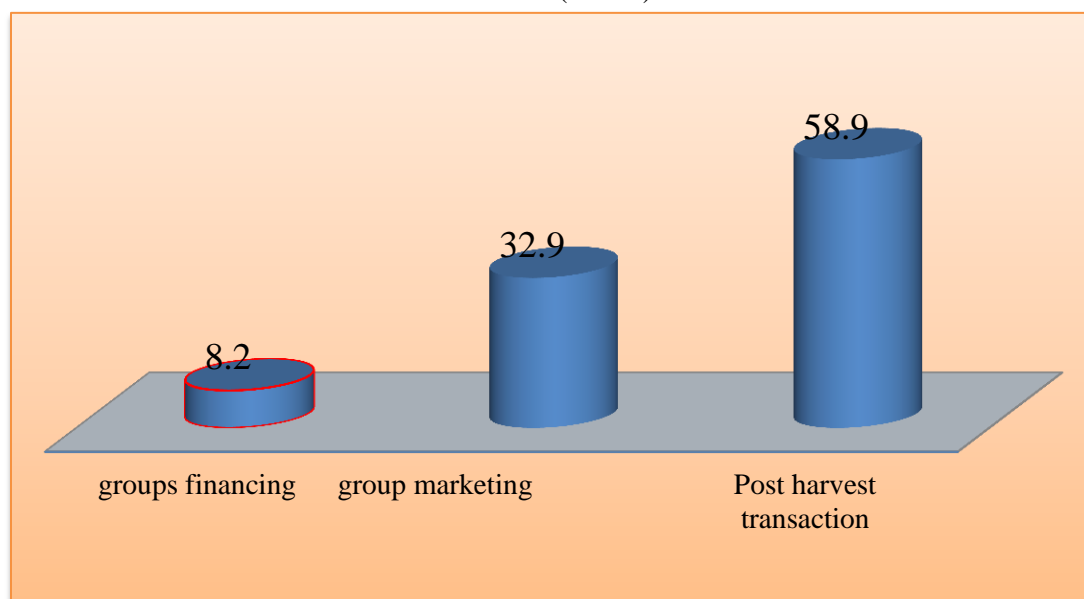


Figure3:

Likert Scale Measuring Members Attitude Toward agricultural extension activities:

The members of the cooperative society were dissatisfied by the agricultural services rendered in building their capacity about management, bookkeeping and accounting, monitoring and supervision follow up activities (table 1). Only report writing and periodical meetings for decision making were satisfactory services. The calculated opinion index gave 2.4 which is less than Likert average of (2.5). This result disagrees with Jamal- et al, (2011) who concluded that an extension/education service what respondents still need for more intensive training these services.

It can be seen from Table (1) a positive valuation towards agricultural extension programs that helped on member's in building capacity the average value (2.4). This result means that farmers were satisfied with these programs. Similar study conduct in Iran about Examining the Impact of Extension programs on Water Resources Management, the results demonstrated that the opinions and attitudes of farmers to a great extent depend upon the relevance of educational content with the needs of farmers. The extension/education activities fulfill the needs of the target population. Jamal, et al (2011)

Table (1): measuring Agricultural Cooperative members' valuation of agricultural extension programs on member's capacity building:

No	Items	Degree	Rank
1	To how to manage cooperative Society	2.6	2
2	Book keeping and accountants of the Association	2.5	3
3	Supervising and monitoring the activities of the society	2.8	1
4	Communication between Association Members	2.5	3
5	conducting meeting for dissection	2.3	4
6	Report writing	1.9	5
	Liker scale	2.4	

Statistical analysis (2019)

Table (2) shows that dissatisfactions of the members towards the programs that business facilities, provide data and market viability study, marketing information, provide marketing information in time, with the Likert scale less than (3) degree that indicates less than agree Similar study was conducted in India by Sudarshan C Awatade, Souvik Ghosh and R B Singandhupe (2019) to assess the satisfaction level of farmers' with extension services provided to them. The findings of this study revealed that a modest level of satisfaction among farmers with the extension services in the state of Maharashtra. Farmers seemed to be satisfied with some extension service such as: "advice from extension service is always true," "the service is vital to my farming" and "Extension offers a high-quality service and the respondents are convinced that the extension activities provided to them increase their information and needs more in these programs through these Activities. Similar study by Henry A Dakurah-et al, (2005) say that revealed Respondents' beliefs in cooperative principles were assessed using a set of 17 belief statements offering them the opportunity to either agree or disagree with the statement on a 7-point Likert scale. (50%) agreed or strongly supported most cooperative principles. A majority (93%) strongly disagreed when asked 'I do not know that cooperatives exist', and if one had heard about cooperatives but was not familiar with the way they work.

Table (2): measuring the members' valuation towards their benefits from agricultural extension programs.

No	Items	Degree
1	Business Facilities	2.4
2	Data and Market viability study	2.3
3	Marketing Information	2.1
4	Provision of Marketing Information in time	2.1
5	Entering Communication Technology	2.6
6	Transfer Agricultural Production& market it	2.9
7	Added value	2.8
8	Specification and Control of Agricultural Products	2.0

Likert scale

2.4

Statistical analysis (2019)

Table (3) measuring the valuation of respondents towards agricultural extension programs in the economic and social benefits, Result show that the average Likert scale to each statement provides farmers' satisfaction towards extension programs to there is strongly agree on respondents towards extension programs in increase productivity and high economic return but However there is an evaluation by some respondents of the weakness of the extension programs provided to them on activities of the members in participation and empowerment Increase domestic marketing ,Increase Externally marketing

Table (3) :measuring the valuation of respondents towards agricultural extension programs In the economic and social benefits.

No	Items	Degree
1	High Productivity	2.8
2	Higher economic return	2.9
3	Participation of Members in the community activities &Development	2.3
4	Activities of the members in participation and empowerment	2.3
5	Increase domestic marketing	2.6
6	Increase Externally marketing	1.4
	Liker scale	2.4

Statistical analysis (2019).

Table (4) The Likert scale for measuring the valuation respondents towards the principles of the cooperatives The findings revealed that The Liker scale about the valuation respondents towards the principles of the cooperatives represented in the terms: Identify the responsibility for each individual and for all, Cooperatives controlled by their members, Members Economic Participation, Members have equal voting rights (one member, one vote), Cooperatives provide education and training for their members, Cooperation among others Cooperatives, cooperatives work for the sustainable development of their communities. Overall mean value was (2.0) indicating a negative valuating toward the principle of cooperatives. Indicated that dissatisfaction of the Cooperative members with the Agricultural Extension programs level less (2) and all of them are less than the level of sufficiency in the awareness of the cooperative members

Table (4): measuring the valuation respondents towards the principles of the cooperatives

No	Items	Degree
1	Identify the responsibility for each individual and for all	2.2
2	Cooperatives controlled by their members	2.1
3	Members' Economic Participation.	2.2
4	Members have equal voting rights (one member, one vote).	2.1
5	Cooperatives provide education and training for their members	1.9
6	Cooperation among others Cooperatives.	2.0
7	cooperatives work for the sustainable development of local communities	2.0
	Liker scale	2.0

Social survey (2019)

Conclusion:

Global developments require a new vision and promotion of improved best practices and agricultural extension programs to be revitalized and more effective in meeting the diverse needs of the farmers. The challenge in this study is how to help the members of cooperatives to identify the agricultural extension programs and approaches to be able to operate more effectively because the farmer's participation was very important to identify their needs.

Recommendation:

Confirming the finding obtained about the member's attitude towards the Principles of Cooperatives.

+ Since agricultural cooperatives considered as an instrument to achieve self-sufficiency in agriculture, it is necessary for the agricultural extension agents to study carefully the agricultural cooperatives and take necessary steps for achieving it.

- + Agricultural Extension agents should develop skills in planning and managing groups. So that local people learn organizing skills, the Extension agent may help farmers form associations or co-operatives.
- + Agricultural Extension activities should be planned with the full involvement of farmers to increase their level of participation.
- + Agricultural Extension activities should raise awareness of the members on the general principles of cooperatives.

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